

PATENT
Serial No. 10/511,804
Amendment in Reply to Office Action mailed on March 29, 2007

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A luminescent screen comprising particles of luminescent material embedded in an inorganic material, wherein the inorganic material comprises aluminium-mono aluminum phosphate and silicon oxide that fill pores between the particles of luminescent material.

Claims 2-3 (Canceled)

4. (Previously presented) A discharge lamp equipped with the luminescent screen as claimed in claim 1.

5. (Previously presented) The discharge lamp as claimed in claim 4, wherein the discharge lamp comprises a lamp vessel that is

PATENT

Serial No. 10/511,804

Amendment in Reply to Office Action mailed on March 29, 2007

transparent for visible light and the luminescent screen is deposited on part of an inner wall or part of an outer wall of the lamp vessel.

6. (Previously presented) The discharge lamp as claimed in claim 5, wherein the luminescent screen is covered by a top layer.

7. (Previously presented) The discharge lamp as claimed in claim 6, wherein the top layer comprises a compound chosen from the group formed by yttrium oxide and yttrium-strontium-borate.

8. (Previously presented) The discharge lamp as claimed in claim 4, wherein the discharge lamp is a fluorescent lamp.

9. (Currently Amended) The luminescent screen of claim 1, wherein a diameter of the particles of the luminescent material is greater than a diameter of the inorganic particles of the aluminium aluminum phosphate by at least an order of magnitude of ten times.

Claim 10 (Canceled)

PATENT

Serial No. 10/511,804

Amendment in Reply to Office Action mailed on March 29, 2007

11. (Currently amended) A luminescent screen comprising:
a first layer comprising a luminescent material having
luminescent particles; and
a second layer comprising an inorganic material having
inorganic particles including ~~aluminium~~ mono aluminum phosphate;
wherein the inorganic particles are smaller than the
luminescent particles so that the inorganic particles fill pores
between the luminescent particles; the second layer directly
covering the first layer.

12. (Previously presented) The luminescent screen of claim 11,
wherein a diameter of the luminescent particles is greater than a
diameter of inorganic particles by at least an order of magnitude
of ten times.

13. (Previously presented) The luminescent screen of claim 11,
wherein the inorganic material further includes silicon oxide.

14. (Currently amended) A discharge lamp comprising:

PATENT

Serial No. 10/511,804

Amendment in Reply to Office Action mailed on March 29, 2007

a discharge vessel; and

a luminescent screen formed on a wall of the discharge vessel;

the luminescent screen comprising:

a first layer comprising luminescent material having
luminescent particles formed on the wall of the discharge vessel;
and

a second layer comprising inorganic material having inorganic
particles including ~~aluminium~~ mono aluminum phosphate formed on the
first layer;

wherein the second layer directly covers the first layer and
fill pores between the luminescent particles.

15. (Previously presented) The discharge lamp of claim 14,
wherein a diameter of the luminescent particles is greater than a
diameter of inorganic particles by at least an order of magnitude
of ten times.

16. (Previously presented) The discharge lamp of claim 14,
wherein the inorganic material further includes silicon oxide.

PATENT

Serial No. 10/511,804

Amendment in Reply to Office Action mailed on March 29, 2007

17. (Previously presented) The discharge lamp of claim 14, further comprising a top layer formed over the luminescent screen.

18. (Previously presented) The discharge lamp of claim 14, wherein the top layer comprises a compound chosen from the group formed by yttrium oxide and yttrium-strontium-borate.

19. (Currently amended) A method of forming a luminescent screen on a lamp wall comprising the acts of:

mixing luminescent particles with ~~aluminium~~ mono aluminum phosphate and silicon oxide particles to form a slurry; applying the slurry to the lamp wall; and drying the lamp wall.

Claim 20 (Canceled)